

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-89 (Canceled)

⁸
Claim 90 (Currently Amended) The method of claim ~~88 or 89~~ ^{1 5} ~~95~~ or ~~96~~ wherein the nucleic acid molecule encoding B7-2 is a viral vector.

⁹
Claim 91 (Previously Presented) The method of claim ⁸ ~~90~~ wherein the viral vector is selected from the group consisting of a retroviral vector, an adenoviral vector, and an adeno-associated vector.

¹⁰
Claim 92 (Currently Amended) The method of claim ~~88 or 89~~ ^{1 5} ~~95~~ or ~~96~~ wherein the nucleic acid molecule encoding B7-2 is a plasmid expression vector.

Claims 93-94 (Canceled)

¹
Claim 95 (Previously Presented) A method for treating a mammalian subject having a solid tumor, comprising direct injection of a nucleic acid molecule encoding B7-2 molecule in a form suitable for expression of the B7-2 molecule, into cells of the tumor, wherein the B7-2 molecule has the ability to costimulate a T cell and the ability to bind a CD28 or CTLA4 ligand, such that the growth of the tumor is inhibited.

²
Claim 96 (Previously Presented) The method of claim ¹ ~~95~~, wherein B7-2 comprises the amino acid sequence shown in SEQ ID NO:2.

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PRIMARY EXAMINER

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Claim 97 (Previously Presented) The method of claim ¹~~98~~, wherein the nucleic acid molecule encoding B7-2 comprises the nucleic sequence shown in SEQ ID NO:1.

⁴
Claim 98 (Previously Presented) The method of Claim ¹~~95~~ wherein the solid tumor is selected from the group consisting of carcinoma, sarcoma, melanoma and neuroblastoma.

⁵
Claims 99 (Previously Presented) A method for modifying cells of a solid tumor *in vivo* to express a B7-2 molecule, comprising direct injection of a nucleic acid molecule encoding a B7-2 molecule in a form suitable for expression of the B7-2 molecule, into the tumor cells, wherein the B7-2 molecule has the ability to costimulate a T cell and the ability to bind a CD28 or CTLA4 ligand, such that B7-2 is expressed by the tumor cells.

⁶
Claim 100 (Currently amended) The method of claim ⁵~~99~~ wherein the B7-2 molecule comprises the amino acid sequence shown in SEQ ID NO:2.

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Claim 101 (Previously Presented) The method of claim ⁵~~99~~ wherein the nucleic acid encoding a B7-2 molecule comprises the nucleic acid sequence shown in SEQ ID NO:1.

¹¹
Claim 102 (Currently Amended) The method of claim ¹~~95~~ or ⁵~~96~~ wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding a B7 protein.

¹²
Claim 103 (Currently Amended) The method of claim ¹~~95~~ or ⁵~~96~~ wherein the tumor cells are further injected with at least one nucleic acid molecule encoding at least one MHC class II α chain protein and at least one MHC class II β chain protein in a form suitable for expression of the MHC class II α chain protein(s) and the MHC class II β chain protein(s).

¹³
Claim 104 (Currently Amended) The method of claim ¹~~95~~ or ⁵~~96~~ wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding at least one MHC class I α chain protein in a form suitable for expression of the MHC class I protein(s).

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Claim 106 (Currently Amended) The method of claim ~~95~~ or ~~96~~ wherein the tumor cells are further transfected with a nucleic acid molecule encoding a β -2 microglobulin protein in a form suitable for expression of the β -2 microglobulin protein.

Claim 106 (Canceled)

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Claim 107 (Currently Amended) The method of claim ~~106~~ ~~95~~ or ~~96~~ wherein expression of the MHC class II invariant chain is inhibited in the tumor cells by transfection of the tumor cells with a nucleic acid molecule which is antisense to a regulatory or a coding region of the invariant chain gene.

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Claim 108 (Previously Presented) The method of claim ~~96~~ wherein the solid tumor is selected from a group consisting of a carcinoma, sarcoma, melanoma and neuroblastoma.

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Claim 109 (Previously Presented) A method of increasing the immunogenicity of a cells of a solid tumor comprising, direct injection of a nucleic acid molecule encoding a B7-2 molecule in a form suitable for expression of the B7-2 molecule, into the tumor cells, wherein the B7-2 molecule has the ability to costimulate a T cell and the ability to bind a CD28 or CTLA4 ligand, such that B7-2 is expressed by the tumor cells, to thereby increase the immunogenicity of the tumor cells.

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Claim 110 (Previously Presented) The method of Claim ~~109~~ wherein B7-2 comprises the amino acid sequence shown in SEQ ID NO:2.

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Claim 111 (Previously Presented) The method of Claim ~~109~~ wherein the nucleic acid molecule encoding a B7-2 molecule comprises the nucleic sequence shown in SEQ ID NO:1.

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Claim 112 (Previously Presented) The method of Claim ~~109~~ wherein the solid tumor is selected from a group consisting of a carcinoma, sarcoma, melanoma and neuroblastoma.

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²¹
Claim 113 (New) The method of claim ¹⁷~~109~~ wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding a B7 protein.

²²
Claim 114 (New) The method of claim ¹⁷~~109~~ wherein the tumor cells are further injected with at least one nucleic acid molecule encoding at least one MHC class II α chain protein and at least one MHC class II β chain protein in a form suitable for expression of the MHC class II α chain protein(s) and the MHC class II β chain protein(s).

²³
Claim 115 (New) The method of claim ¹⁷~~109~~ wherein the tumor cells are further transfected with at least one nucleic acid molecule encoding at least one MHC class I α chain protein in a form suitable for expression of the MHC class I protein(s).

²⁴
Claim 116 (New) The method of claim ¹⁷~~109~~ wherein the tumor cells are further transfected with a nucleic acid molecule encoding a β -2 microglobulin protein in a form suitable for expression of the β -2 microglobulin protein.

²⁵
Claim 117 (New) The method of claim ¹⁷~~109~~ wherein expression of the MHC class II invariant chain is inhibited in the tumor cells by transfection of the tumor cells with a nucleic acid molecule which is antisense to a regulatory or a coding region of the invariant chain gene.